

CLAIMS

What is claimed is:

5           1.    A production profile determination and  
modification system, comprising:

a logging system having a logging tool;

10           a downhole unit operable to house the logging tool and  
to selectively secure a retrievable fluid barrier  
within a wellbore casing; and

15           a deployment system operable to deploy the downhole  
unit in the wellbore casing.

2.    The system as recited in claim 1, further  
comprising the fluid barrier.

20           3.    The system as recited in claim 2, wherein the  
fluid barrier is a retrievable bridge plug.

4. The system as recited in claim 1, wherein the logging system is operable to identify oil, gas, and water bearing strata.

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5. The system as recited in claim 1, wherein the logging system is operable to identify relative percentages of oil, water, and gas in wellbore fluid at a downhole location.

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6. The system as recited in claim 1, wherein the logging system is operable to identify flow rates of oil, water, and gas at a downhole location.

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7. The system as recited in claim 1, wherein the logging system comprises a data acquisition system.

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8. The system as recited in claim 7, wherein the logging system comprises a wireline operable to transmit data from the logging tool to the data acquisition system.

9. The system as recited in claim 8, wherein the logging tool is raised and lowered relative to the housing by the wireline.

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10. The system as recited in claim 1, wherein the downhole unit comprises an artificial lift device to induce fluid flow in wellbore fluids downhole.

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11. The system as recited in claim 1, wherein the deployment system comprises a coupling member secured to the downhole unit and to a surface structure.

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12. The system as recited in claim 11, wherein the coupling member comprises a wireline.

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13. The system as recited in claim 1, wherein the logging tool is lowered from the downhole unit to log data.

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14. A downhole system for facilitating measurement of fluid parameters in a wellbore, comprising:

a downhole tool, comprising:

5 a first portion operable to house a well logging  
tool; and

a second portion operable to selectively secure a  
retrievable fluid barrier to a wellbore  
casing.

10 15. The downhole system as recited in claim 14,  
wherein the downhole tool is adapted to enable the well  
logging tool to be positioned relative to the first portion.

15 16. The downhole system as recited in claim 15,  
wherein the second portion is adapted to enable a portion of  
the well logging tool to be disposed through the second  
portion.

20 17. The downhole system as recited in claim 16,  
wherein the downhole system comprises an artificial lift  
device operable to induce fluid flow in the wellbore.

18. The downhole system as recited in claim 14,  
wherein the well logging tool is raised and lowered relative  
to the downhole tool by a wireline.

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19. The downhole system as recited in claim 18 ,  
wherein the downhole tool has a side door to enable the  
wireline to pass into the first portion of the downhole  
tool.

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20. The downhole system as recited in claim 14,  
further comprising the well logging tool.

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21. The downhole system as recited in claim 20,  
wherein the well logging tool is operable to identify oil,  
gas, and water bearing strata.

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22. The downhole system as recited in claim 16,  
wherein the well logging tool is operable to measure  
percentages of oil, water, and gas in wellbore fluid at a  
downhole location.

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23. The downhole system as recited in claim 16,  
wherein the well logging tool is operable to measure fluid  
velocity at a downhole location.

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24. The downhole system as recited in claim 16,  
wherein the first portion comprises a downhole lubricator  
adapted to house the well logging device.

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25. The downhole system as recited in claim 24,  
wherein the second portion comprises an overshot secured to  
the downhole lubricator.

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26. A method of profiling and modifying fluid flow  
within a wellbore, comprising:

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deploying a tool string into a wellbore lined with a  
casing, the tool string having a retrievable fluid  
barrier, a logging tool and a downhole tool;

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actuating the downhole tool to secure the fluid barrier  
within the casing below a first group of  
perforations in the casing;

disengaging the downhole tool from the fluid barrier;

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operating the logging tool to detect characteristics of  
the fluid flowing into the wellbore through the  
first group of perforations.

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27. The method as recited in claim 26, further  
comprising:

releasing the fluid barrier; and

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moving the fluid barrier to another location within the  
casing.

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28. The method as recited in claim 26, wherein  
operating comprises lowering at least a portion of the  
logging tool below the downhole tool.

29. The method as recited in claim 26, comprising obtaining a flow of fluid into the wellbore via the first group of perforations.

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30. The method as recited in claim 29, wherein deploying comprises securing an artificial lift device to the tool string.

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31. The method as recited in claim 30, wherein obtaining comprises operating the artificial lift device to cause the flow of fluid.

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32. The method as recited in claim 26, wherein operating comprises operating the logging device to identify percentages of oil and water in the flow of fluid.

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33. The method as recited in claim 26, further comprising raising the tool string above the first group of perforations in the casing after securing the fluid barrier within the casing below the first group of perforations in the casing.

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34. The method as recited in claim 26, further comprising retrieving the fluid barrier with the tool string.

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35. The method as recited in claim 26, further comprising:

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repositioning the tool string in the casing;

securing the fluid barrier within the casing below a

second group of perforations in the casing; and

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operating the logging tool to detect characteristics of the fluid flowing into the wellbore via the second group of perforations.

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36. The method as recited in claim 35, further comprising analyzing the characteristics of the fluid flowing into the wellbore through the first and second group of perforations to identify which group of perforations produces a more desirable fluid flow.

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37. The method as recited in claim 36, further comprising securing the fluid barrier within the casing to isolate fluid flow through the casing via the group of perforations that produces the more desirable fluid flow.

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38. The method as recited in claim 37, wherein deploying a tool string into a wellbore lined with the casing; analyzing the characteristics of the fluid; and  
10 securing the fluid barrier to isolate fluid flow are performed during a single trip of the tool string into the wellbore.